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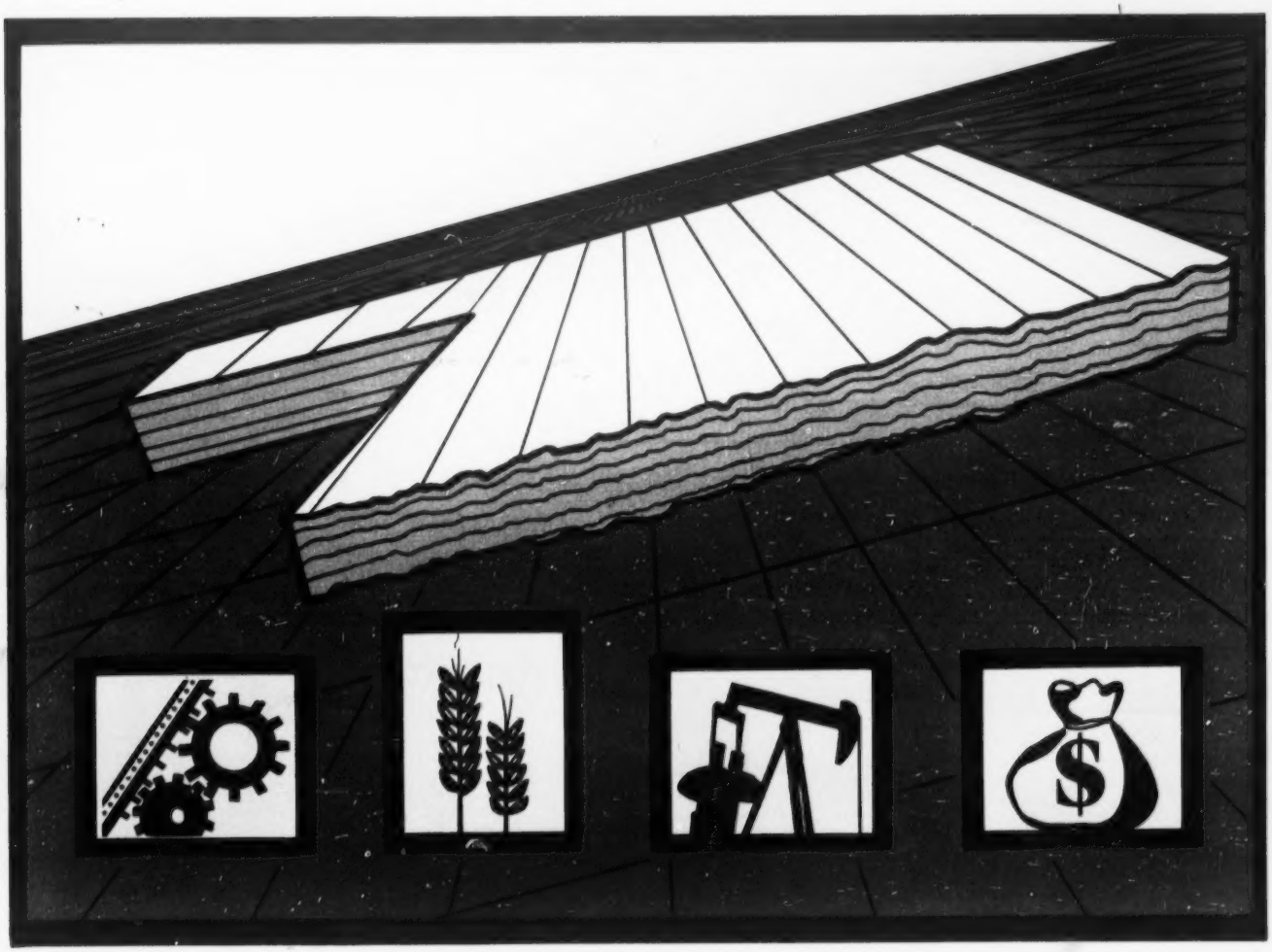

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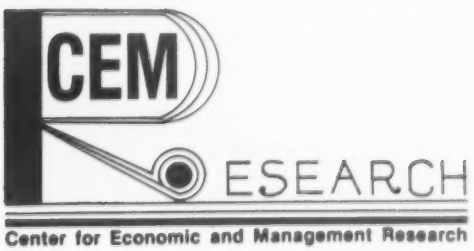

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SUMMARY OF INDICATORS

Category	3 Mos. '89	3 Mos. '88	Mar. '89	Percentage Change 3 Mos. '89/'88	Percentage Change Mar./Feb. '89
Personal Income (Monthly Average)					
Unadjusted ($000,000)	3,790	3,536	3,820	7.2	0.8
Adjusted for CPI ($000,000)	3,114	3,046	3,123	2.2	0.2
Crude Oil Production (000 bbl)[a]	17,522	20,056	7,810	-12.6	-19.6
Natural Gas Production (000 mcf)[a]	303,070	360,256	120,446	-15.9	-34.0
Industrial Power Sales (000,000 Kwh)[b]	2,106	2,022	665	4.2	-0.4
Total Bank Deposits (Monthly Average) ($000,000)[c]					
Demand	7,549	7,561	7,415	-0.2	-1.0
Savings	23,683	24,613	23,602	-3.8	-0.3
Savings and Loan Associations ($000,000)					
Assets	10,804	7,980	10,861	35.4	1.5
Mortgage Loans Closed	137	113	42	3.3	24.8
General Business Index	95.0	90.9	96.2	4.6	1.4

Note: Includes revisions.

[a]Two months and February data. Natural gas includes casinghead gas.

[b]Sales of larger privately owned utility companies.

[c]Total deposits of all depository institutions.

SELECTED ECONOMIC INDICATORS

Category	3 Mos. '89	3 Mos. '88	Mar. '89	Percentage Change 3 Mos. '89/'88	Percentage Change Mar./Feb. '89
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value ($000)	63,915	63,558	22,534	0.6	19.9
Number of Units	820	853	285	-3.9	17.8
Residential—Multi Family					
Dollar Value ($000)	5,513	1,809	0	204.8	0.0
Number of Units	175	89	0	96.6	0.0
Nonresidential					
Commercial ($000)	28,083	22,400	9,037	25.4	15.0
Industrial ($000)	7,239	10,452	562	-30.7	-87.2
Institutional ($000)	4,284	8,359	385	-48.7	-75.7
Nonbuilding					
Streets and Highways ($000)	47,621	84,782	14,515	-43.8	-30.6
All Other Nonbuilding ($000)	897	1,305	392	-31.3	121.0
Total Construction ($000)	157,552	192,665	47,425	-18.2	-11.7
EMPLOYMENT TRENDS					
Total Labor Force (000)[a]	1,513.5	1,534.3	1,498.4	-1.4	-1.2
Total Employment (000)	1,412.3	1,420.7	1,400.1	-0.6	-0.9
Unemployment Rate (%)	6.7	7.4	6.6	—	—
Wage and Salary Employment	1,131.3	1,116.2	1,137.7	1.4	0.6
Manufacturing (000)	163.2	159.7	162.8	2.2	-0.3
Mining (000)	43.8	45.5	43.7	-3.7	0.9
Government (000)	252.5	250.4	255.7	0.8	0.7
Contract Construction (000)	31.6	32.6	32.6	-3.1	4.8
Services (000)	247.8	239.2	249.3	3.6	0.5
Retail Trade (000)	214.4	208.9	215.5	2.6	1.1
Average Weekly Hours					
Manufacturing (Per Worker)	40.8	40.8	40.5	0.0	-1.5
Average Weekly Earnings					
Manufacturing ($ Per Worker)	432.28	418.28	432.54	3.3	-0.2
Contract Construction ($ Per Worker)	414.70	407.66	423.26	1.7	8.8
Retail Trade ($ Per Worker)[b]	189.31	185.61	189.11	2.0	0.2

Note: Includes revisions in some previous months.

[a]Civilian Labor Force, Labor Force Employment and unemployment rate refer to place of residence, nonagricultural wage and salary employment refer to place of work.

RETAIL TRADE IN METRO AREAS AND STATE
($000)

Retail Trade	3 Mos. '89 Adjusted	3 Mos. '88 Adjusted	Mar. '89 Adjusted	Mar. '89 Unadjusted	Percentage Change 3 Mos. '89/'88 Adjusted	Percentage Change Mar./Feb. '89 Adjusted	Percentage Change Mar./Feb. '89 Unadjusted
OKLAHOMA CITY MSA							
Food Group	595,435	570,627	202,322	204,126	4.3	3.3	11.0
Apparel Group	42,739	46,038	14,631	14,986	-7.2	4.1	37.4
General Merchandise Group	191,226	191,540	72,756	67,441	-0.2	34.3	52.6
Furniture Group	73,430	56,843	24,647	21,137	29.2	4.1	-3.2
Lumber Group	42,487	44,621	13,347	12,976	-4.8	-4.4	28.8
Auto Dealers	424,547	436,855	141,288	120,541	-2.8	7.8	-4.6
Gasoline	54,044	49,951	21,943	19,138	8.2	48.5	47.0
All Other	191,429	204,714	63,015	59,979	-6.5	0.6	35.4
Total	1,615,337	1,601,189	553,949	520,324	0.9	8.6	14.4
TULSA MSA							
Food Group	340,975	329,560	117,295	117,851	3.5	5.6	15.5
Apparel Group	36,423	44,202	12,525	12,512	-17.6	5.0	37.6
General Merchandise Group	167,841	174,080	60,466	59,737	-3.6	21.6	56.4
Furniture Group	38,172	40,142	12,628	11,188	-4.9	-0.1	-3.5
Lumber Group	36,223	32,486	11,264	10,787	11.5	-2.1	22.5
Auto Dealers	247,023	254,182	82,208	70,136	-2.8	7.8	-4.6
Gasoline	44,401	41,038	18,028	15,723	8.2	48.5	47.0
All Other	28,433	30,672	9,365	8,569	-7.3	-4.6	-6.2
Total	939,491	946,362	323,779	306,503	-0.7	9.7	16.5
ENID MSA							
Food Group	28,623	26,513	9,813	9,790	8.0	3.6	14.2
Apparel Group	3,992	4,132	1,558	1,512	-3.4	17.1	34.8
General Merchandise Group	12,599	13,143	5,013	4,637	-4.1	53.1	94.6
Furniture Group	3,165	3,149	1,016	972	0.5	1.0	6.0
Lumber Group	4,265	3,819	1,480	1,375	11.7	12.0	51.6
Auto Dealers	24,296	25,003	8,085	6,898	-2.8	7.8	-4.6
Gasoline	3,983	3,682	1,618	1,411	8.2	48.6	47.0
All Other	9,294	9,093	3,383	2,675	2.2	23.2	26.0
Total	90,217	88,534	31,966	29,270	1.9	15.2	20.4
LAWTON MSA							
Food Group	46,535	46,485	16,155	16,688	0.1	7.0	18.6
Apparel Group	5,740	5,503	2,006	2,058	4.3	11.8	56.3
General Merchandise Group	36,076	38,900	12,625	12,085	-7.3	6.6	26.7
Furniture Group	6,874	7,169	2,381	2,332	-4.1	6.3	10.4
Lumber Group	4,104	4,426	1,453	1,448	-7.3	10.7	45.2
Auto Dealers	32,382	33,320	10,776	9,194	-2.8	7.8	-4.6
Gasoline	2,719	2,514	1,105	963	8.2	48.7	47.0
All Other	9,601	9,871	3,196	2,870	-2.7	6.8	5.4
Total	144,031	148,188	49,697	47,638	-2.8	8.0	16.1
MUSKOGEE AREA							
Food Group	34,017	31,633	11,542	11,379	7.5	1.5	9.1
Apparel Group	5,837	4,906	2,052	2,104	19.0	8.7	46.4
General Merchandise Group	11,323	12,398	4,553	4,346	-8.7	50.1	106.1
Furniture Group	3,689	3,207	1,275	1,082	15.0	-3.0	-6.2
Lumber Group	1,097	1,104	347	349	-0.6	5.5	44.8
Auto Dealers	20,428	21,023	6,798	5,798	-2.8	7.8	-4.6
Gasoline	3,484	3,222	1,421	1,232	8.1	49.4	47.0
All Other	7,921	9,323	2,426	2,614	-15.0	-9.4	86.3
Total	87,796	86,816	30,414	28,904	1.1	9.1	22.0
STATE[a]							
Durable Goods	1,520,906	1,562,751	501,311	441,283	-2.7	5.9	0.8
Auto Dealers	1,060,718	1,091,452	352,999	301,170	-2.8	7.8	-4.6
Accessory Dealers	85,528	83,542	27,278	26,933	2.4	-1.0	16.4
Total Automotive	1,146,246	1,174,994	380,277	328,103	-2.4	7.1	-3.2
Furniture	92,303	89,390	29,275	28,909	3.3	-6.4	2.6
Household Appliances	55,245	62,481	18,349	17,203	-11.6	3.6	7.5
Total Furniture and Appliances	147,548	151,871	47,624	46,112	-2.8	-2.8	4.4
Lumber and Building Materials	137,782	134,897	44,342	41,947	2.1	11.4	38.0
Hardware Stores	16,801	16,818	5,601	5,500	-0.1	5.1	29.3
Total Lumber, Building Materials & Hardware	154,583	151,715	49,943	47,447	1.9	10.7	37.0
Nondurable Goods	2,763,114	2,650,262	942,363	906,967	4.3	2.0	13.9
Apparel	147,435	160,407	50,648	51,824	-8.1	5.9	40.8
Drug Stores	133,527	125,264	44,823	44,126	6.6	4.5	7.4
Eating and Drinking Places	486,997	470,781	161,853	164,728	3.4	0.1	12.3
Food Group	1,100,871	1,061,897	383,402	375,475	3.7	3.0	11.8
Gasoline	177,471	164,014	72,055	62,847	8.2	48.5	47.0
General Merchandise Group	524,853	479,980	169,156	145,643	9.3	-8.2	3.9
Total Retail Trade	4,284,020	4,213,013	1,443,674	1,348,250	1.7	3.3	9.2

[a]Total includes data for categories not shown in the table.

RETAIL TRADE IN SELECTED CITIES
($000)

Retail Trade	3 Mos. '89 Adjusted	3 Mos. '88 Adjusted	Mar. '89 Adjusted	Mar. '89 Unadjusted	Percentage Change 3 Mos. '89/'88 Adjusted	Percentage Change Mar./Feb. '89 Adjusted	Percentage Change Mar./Feb. '89 Unadjusted
Ada	40,538	39,912	14,276	13,574	1.6	14.1	21.3
Altus	34,946	36,979	12,126	11,761	-5.5	7.8	22.6
Alva	10,908	11,175	3,791	3,647	-2.4	8.0	21.6
Anadarko	14,368	14,264	5,033	5,048	0.7	10.3	29.7
Ardmore	56,205	57,524	20,073	18,161	-2.3	17.7	20.0
Bartlesville	59,297	56,384	21,407	19,797	5.2	21.5	24.0
Blackwell	9,814	10,724	3,336	3,216	-8.5	9.5	21.4
Broken Arrow	57,462	56,061	19,502	18,834	2.5	7.1	18.9
Chickasha	26,884	27,352	9,788	9,207	-1.7	21.0	28.4
Clinton	19,409	19,635	6,797	6,193	-1.2	11.6	17.1
Cushing	15,395	15,582	5,443	5,478	-1.2	15.8	36.4
Del City	31,734	31,321	11,162	10,706	1.3	15.9	20.6
Duncan	41,876	42,360	14,670	14,144	-1.1	12.8	22.0
Durant	30,489	32,609	11,149	10,047	-6.5	21.2	26.1
Edmond	74,011	71,896	24,926	24,489	2.9	5.4	16.6
Elk City	22,034	22,174	7,679	7,308	-0.6	12.2	23.2
El Reno	23,634	21,853	8,181	7,847	8.1	13.6	21.6
Guthrie	15,125	15,538	5,157	4,839	-2.7	6.2	15.3
Guymon	13,485	13,217	5,149	4,732	2.0	40.8	47.0
Henryetta	13,747	14,134	4,822	4,591	-2.7	10.2	24.9
Hobart	6,613	6,801	2,225	2,046	-2.8	2.6	5.5
Holdenville	7,437	7,730	2,544	2,491	-3.8	9.7	19.9
Hugo	8,198	8,494	2,836	2,540	-3.5	10.5	8.9
Idabel	10,784	10,508	3,623	3,519	2.6	3.9	12.8
Lawton	137,362	141,556	47,671	45,375	-3.0	8.4	16.2
McAlester	28,928	30,470	9,922	9,499	-5.1	8.9	22.3
Miami	31,588	33,713	11,153	10,766	-6.3	17.5	27.0
Midwest City	99,365	106,399	33,259	32,218	-6.6	3.4	12.7
Moore	35,692	42,703	12,742	12,535	-16.4	18.3	28.0
Norman	181,944	179,602	61,319	56,303	1.3	6.1	6.0
Oklahoma City	823,861	809,023	275,319	255,881	1.8	2.2	11.5
Okmulgee	15,038	15,291	5,324	5,022	-1.7	20.9	24.0
Pauls Valley	12,430	12,203	4,703	4,256	1.9	40.7	37.6
Pawhuska	4,812	4,865	1,517	1,380	-1.1	-4.2	-4.2
Ponca City	50,620	49,113	17,845	16,693	3.1	12.5	23.1
Poteau	13,559	13,271	4,706	4,399	2.2	13.3	18.9
Sand Springs	24,901	24,564	8,515	8,294	1.4	8.6	25.9
Sapulpa	36,349	36,327	12,296	12,044	0.1	5.6	17.0
Seminole	15,775	17,079	5,323	5,067	-7.6	1.6	7.8
Shawnee	80,636	83,220	30,948	28,491	-3.1	25.6	33.0
Stillwater	72,700	74,397	25,236	22,878	-2.3	10.8	14.5
Tahlequah	21,889	22,529	7,453	7,065	-2.8	4.4	14.3
Tulsa	715,293	726,006	246,790	233,564	-1.5	11.3	16.3
Watonga	5,143	5,065	1,853	1,735	1.5	16.6	25.5
Weatherford	15,392	15,959	5,482	5,067	-3.6	18.7	18.1
Wewoka	3,138	3,164	1,054	1,013	-0.8	2.3	8.6
Woodward	32,835	33,547	11,522	10,737	-2.1	16.5	22.9
Total Selected Cities	3,103,643	3,124,293	1,067,647	1,004,497	-0.7	9.0	16.3

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian Hickey, Research Assistant.

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ENID AND LAWTON MSAs

Category	3 Mos. '89	3 Mos. '88	Mar. '89	Percentage Change 3 Mos. '89/'88	Percentage Change Mar./Feb. '89
ENID MSA					
Employment (Number)					
Labor Force[a]	28,008	29,200	27,525	-4.1	-1.5
Total Employment	26,367	27,283	26,025	-3.4	-0.9
Unemployment Rate (%)	5.8	6.5	5.4	—	—
Wage and Salary Employment	21,300	21,567	21,400	-1.2	1.4
Wholesale and Retail Trade	5,900	6,233	5,900	-5.3	0.0
Manufacturing	1,500	1,600	1,600	-6.2	14.3
Industrial Power Sales (000 Kwh)	110,593	111,629	35,820	-0.9	-2.3
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value ($000)	110	90	110	22.2	—
Number of Units	1	1	1	0.0	—
Residential—Multi Family					
Dollar Value ($000)	0	0	0	0.0	0.0
Number of Units	0	0	0	0.0	0.0
Nonresidential					
Commercial ($000)	557	190	516	193.0	E
Industrial ($000)	0	0	0	0.0	0.0
Institutional ($000)	0	0	0	0.0	0.0
Nonbuilding					
Streets and Highways ($000)	398	1,206	398	-66.9	—
All Other Nonbuilding ($000)	6	33	0	-82.2	0.0
Total Construction ($000)	1,071	1,519	1,024	-29.5	E
LAWTON MSA					
Employment (Number)					
Labor Force[a]	47,542	40,117	47,525	-3.2	0.2
Total Employment	44,933	46,250	44,875	-2.8	0.0
Unemployment Rate (%)	5.4	5.8	5.6	—	—
Wage and Salary Employment	33,600	33,900	34,000	-0.9	1.8
Industrial Power Sales (000 Kwh)	45,637	45,177	14,741	1.0	-7.9
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value ($000)	1,403	5,007	383	-72.0	2.1
Number of Units	16	64	5	-75.0	0.0
Residential—Multi Family					
Dollar Value ($000)	0	180	0	—	0.0
Number of Units	0	6	0	—	0.0
Nonresidential					
Commercial ($000)	384	498	100	-22.9	-40.5
Industrial ($000)	0	0	0	0.0	0.0
Institutional ($000)	0	1,000	0	—	0.0
Nonbuilding					
Streets and Highways ($000)	16	1,733	0	-99.1	0.0
All Other Nonbuilding ($000)	0	0	0	—	0.0
Total Construction ($000)	1,803	8,418	483	-78.6	-11.0

Note: Includes revisions. [a]Civilian Labor Force. E = Exceeds 600 percent.

MUSKOGEE MA

Category	3 Mos. '89	3 Mos. '88	Mar. '89	Percentage Change 3 Mos. '89/'88	Percentage Change Mar./Feb. '89
Employment (Number)					
Labor Force	32,050	31,817	31,075	0.7	-2.0
Total Employment	29,350	28,583	28,550	2.7	-1.6
Unemployment Rate (%)	8.4	10.1	8.1	—	—
Industrial Power Sales (000 Kwh)	41,351	43,971	14,067	-6.0	-2.4
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value ($000)	0	216	0	—	0.0
Number of Units	0	2	0	—	0.0
Residential—Multi Family					
Dollar Value ($000)	0	0	0	0.0	0.0
Number of Units	0	0	0	0.0	0.0
Nonresidential					
Commercial ($000)	0	400	0	—	0.0
Industrial ($000)	0	0	0	0.0	0.0
Institutional ($000)	0	0	0	0.0	0.0
Nonbuilding					
Streets and Highways ($000)	0	577	0	—	0.0
All Other Nonbuilding ($000)	0	5	0	—	0.0
Total Construction ($000)	0	1,197	0	—	0.0

Note: Includes revisions.

TULSA MSA

Category	3 Mos. '89	3 Mos. '88	Mar. '89	Percentage Change 3 Mos. '89/'88	Percentage Change Mar./Feb. '89
Employment (Number)					
Labor Force[a]	337,433	341,267	335,800	-1.1	-0.8
Total Employment	313,433	313,367	312,200	0.0	-0.3
Unemployment Rate (%)	7.1	8.2	7.0	—	—
Wage and Salary Employment	296,900	292,100	297,400	1.6	0.3
Manufacturing	49,500	48,900	49,200	1.2	-1.0
Mining	14,300	14,333	14,300	-0.2	0.0
Government	36,900	37,367	37,200	-1.2	0.3
Wholesale and Retail Trade	69,700	70,033	69,900	-0.4	1.4
Average Weekly Earnings					
Manufacturing ($ Per Worker)	437.20	451.09	430.27	-3.1	-1.8
Industrial Power Sales (000 Kwh)	568,753	521,960	186,479	9.0	-2.0
Mortgage Loans Closed ($000,000)[b]	41	46	13	-11.9	16.7
Bank Deposits ($000,000)[c]					
Demand Deposits	932	894	921	4.3	-0.3
Time and Savings Deposits	2,087	2,178	2,111	-4.2	1.7
Air Transportation					
Passengers Enplaning (Number)	303,980	307,577	117,159	-1.2	29.4
Passengers Deplaning (Number)	306,846	308,445	115,399	-0.5	26.6
Freight (Tons)	6,308	4,979	2,290	26.7	17.2
Water Transportation					
Tulsa Port of Catoosa					
Tons In	140,347	147,300	58,656	-4.7	79.7
Tons Out	362,633	365,150	80,076	-0.7	-41.3
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value ($000)	32,856	24,936	10,077	31.8	-4.7
Number of Units	402	324	126	24.1	0.0
Residential—Multi Family					
Dollar Value ($000)	63	1,238	0	-94.9	0.0
Number of Units	2	54	0	-96.3	0.0
Nonresidential					
Commercial ($000)	9,654	3,154	3,617	206.1	53.0
Industrial ($000)	6,844	4,214	562	62.4	-86.6
Institutional ($000)	939	750	0	25.2	0.0
Nonbuilding					
Streets and Highways ($000)	7,167	18,036	3,291	-60.3	40.1
All Other Nonbuilding ($000)	607	851	283	-28.6	266.3
Total Construction	58,130	48,179	17,829	20.7	-8.9
General Business Index	91.8	86.7	93.8	5.8	3.7

Note: Includes revisions.

[a]Civilian Labor Force.

[b]By Savings and Loan Associations.

[c]Deposits of large commercial banks (accounted for 54 percent of all commercial bank deposits as of December 31, 1988).

OKLAHOMA CITY MSA

Category	3 Mos. '89	3 Mos. '88	Mar. '89	Percentage Change 3 Mos. '89/'88	Percentage Change Mar./Feb. '89
Employment (Number)					
Labor Force[a]	487,633	498,867	482,200	-2.3	-1.5
Total Employment	461,533	468,033	456,700	-1.4	-1.3
Unemployment Rate (%)	5.4	6.2	5.3	—	—
Wage and Salary Employment	406,400	403,800	407,200	0.6	0.0
Manufacturing	49,200	47,867	49,500	2.8	0.6
Mining	10,500	12,000	10,300	-12.5	-1.0
Government	99,200	96,333	99,500	3.0	-0.3
Wholesale and Retail Trade	100,500	99,267	100,000	1.2	-0.2
Average Weekly Earnings					
Manufacturing ($ Per Worker)	485.87	461.02	490.47	5.4	0.7
Industrial Power Sales (000 Kwh)	296,058	281,577	99,032	5.1	-0.6
Mortgage Loans Closed ($000,000)[b]	27	22	9	22.7	70.4
Bank Deposits ($000,000)[c]					
Demand Deposits	843	807	790	4.5	-6.9
Time and Savings Deposits	1,181	1,093	1,140	8.0	-3.9
Air Transportation					
Passengers Enplaning (Number)	336,490	329,717	133,172	2.0	33.6
Passengers Deplaning (Number)	340,779	337,380	131,576	1.0	32.9
Freight Enplaned (Tons)	1,886	1,394	487	35.3	-34.2
Freight Deplaned (Tons)	2,415	2,261	755	6.8	-14.7
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value ($000)	23,781	27,847	10,293	-14.6	63.3
Number of Units	316	388	129	-18.6	41.8
Residential—Multi Family					
Dollar Value ($000)	5,450	100	0	E	0.0
Number of Units	173	6	0	E	0.0
Nonresidential					
Commercial ($000)	10,289	14,368	3,648	-28.4	28.6
Industrial ($000)	101	2,716	0	-96.3	0.0
Institutional ($000)	2,346	4,726	320	-50.4	-79.6
Nonbuilding					
Streets and Highways ($000)	4,666	35,164	1,668	-86.7	-31.3
All Other Nonbuilding ($000)	248	350	81	-29.1	-14.2
Total Construction ($000)	46,881	85,272	16,009	-45.0	21.0
General Business Index	95.0	90.9	96.2	4.6	1.4

Note: Includes revisions.

[a]Civilian Labor Force.

[b]By Savings and Loan Associations.

[c]Deposits of large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1988).

E = Exceeds 600 percent.

Business Highlights

DAVID PENN

THE PACE OF OKLAHOMA'S economic recovery slowed somewhat during the 1st quarter of 1989: several indicators of industrial production and consumer spending experienced gains during the period, but the increases generally were lower than occurred from 1st quarter 1987 to 1st quarter 1988.

The slowdown in the rate of recovery of the state's economy probably can be attributed to weakness in the U.S. economy as evidenced by higher interest rates and flat national retail sales. Pushed upward by a tight money policy, interest rates were much higher in the 1st quarter of 1989 than one year earlier: rates on three-month Treasury bills rose from an average of 5.8 percent in 1st quarter 1988 to 8.5 percent in 1st quarter 1989. In addition, seasonally adjusted retail sales on the national level actually declined from January to March 1989 by 0.4 percent. Though these trends usually suggest a recession in the near future, a soft-landing for the U.S. economy may well be the more likely outcome.

A portion of the slower economic pace in the state was due to a diminished rate of growth of wage and salary employment of 1.4 percent, compared with a 1.6 percent gain one year earlier. While the rate of wage and salary employment growth slowed, it nonetheless continued the expansion in the number of payroll jobs that began in 1988. The weakest sector of payroll employment continued to be the mining and construction sectors with employment falling by 3.7 percent and 3.1 percent, respectively.

The manufacturing sector continued to show sizable gains with employment rising by 2.2 percent, a net increase of 3,500 jobs. A large portion of these jobs were generated in the Oklahoma City and Tulsa metropolitan areas. By contrast with Oklahoma, manufacturing employment in the U.S. increased by just 1.6 percent during the same period. The 1st quarter gain of 4.2 percent in industrial power sales also lends support to the notion of a continuing recovery in Oklahoma's manufacturing sector. Much of this gain occurred in the Tulsa and Oklahoma City metropolitan areas which experienced increases of 9 percent and 5.1 percent, respectively. Industrial power sales also rose slightly in the Lawton area but fell in the Enid and Muskogee areas.

Unemployment rates continued to decline in Oklahoma, suggesting a slight tightening of state labor markets. The rate of unemployment fell to an average of 6.7 percent, the lowest level for the 1st quarter since 1982. Unemployment rates also declined in all of the major metropolitan areas of the state.

Retail sales figures for the state suggest a growing degree of caution on the part of consumers. Total sales gained just 1.7 percent from the 1st quarter of 1988, compared with a gain of 5.2 percent from 1st quarter 1987 to the 1st quarter of 1988. Seasonally adjusted auto sales fell by nearly $31 million from one year earlier despite a significant gain in March. Declining sales of household appliances combined with lower auto sales caused sales of durable goods to fall by 2.7 percent from one year earlier.

Buoyed by increased sales of gasoline, general merchandise, and higher sales at drug stores, retail trade of nondurable goods rose by 4.3 percent. However, most of the increase in gasoline sales probably is due to higher prices per gallon rather than an increase in the number of gallons sold.

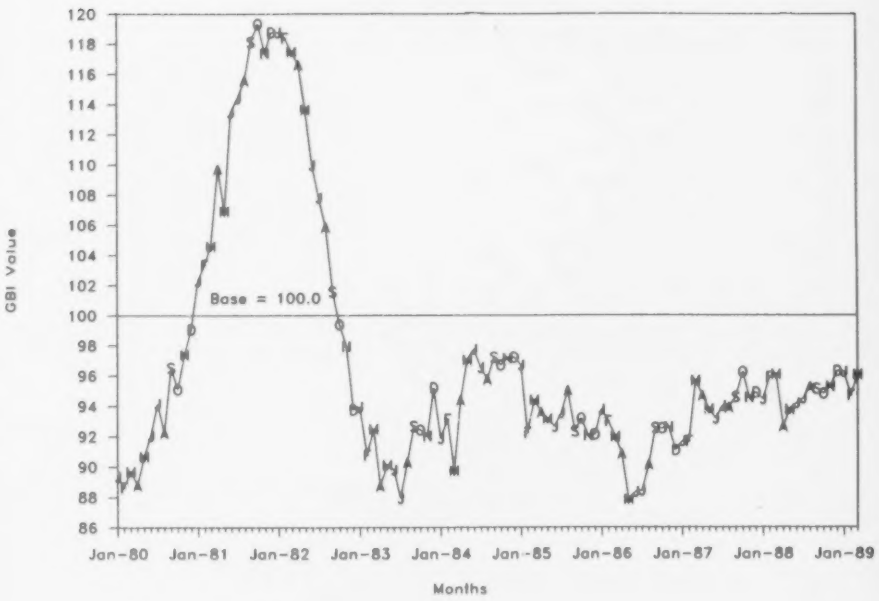
Even though retail sales increased only slowly in Oklahoma, sales by one measure have outpaced those of the U.S. economy. Excluding the volatile auto sector, retail sales in the state economy increased by 2.2 percent from

January to March, compared with a gain of just 0.1 percent in the U.S. economy. Thus, the slowdown in the rate of economic growth seems to have impacted big-ticket auto sales in the retail sector more heavily in the U.S. than in Oklahoma.

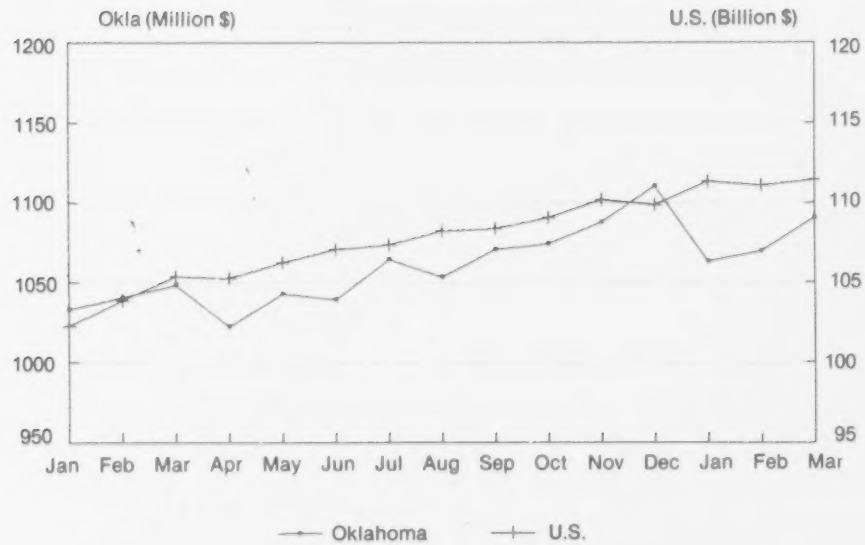
The short-term outlook suggests continued moderate growth rates of payroll employment and manufacturing activity. If interest rates begin to fall, auto sales may also recover, thereby boosting retail sales. Thus, the recovery of Oklahoma's economy will continue, but at a slower pace for the time being. The 4.6 percent gain in the General Business Index suggests that the economy may well gain momentum later in the year.

David Penn is Assistant Director for the Center for Economic and Management Research.

Oklahoma State General Business Index
January 1980 through March 1989



Seasonally Adjusted
Monthly Retail Sales, Excluding Autos
U.S. and Oklahoma, 1988 and January-March 1989



Data: CEMR and U.S. Bureau of Economics Analysis.

Oklahoma Banking 1988

NEIL J. DIKEMAN, JR.

THE BANKING INDUSTRY in Oklahoma has experienced severe problems during at least the past four years and, an examination of the banking industry in other West South Central States (i.e. Arkansas, Louisiana and Texas) revealed that the industry in these states too, had experienced similar problems. For example, bank closings reached epidemic levels in this region between 1985 and 1988 as the total number of banks dropped from 2,897 in the earlier year to 2,584 by the end of 1988. In addition to the decline in banking offices, the market for loans also showed significant losses as did owners' equity and a number of other industry indicators. However, on a more optimistic note, 1988 banking statistics for the area indicated that some improvements in the health of the industry were underway. In an effort to determine how well banks in Oklahoma performed in 1988 relative to the rates of recovery experienced by banks in the remaining West South Central States, changes in various performance and operating indicators of Oklahoma banks between 1987 and 1988 were compared with those of the banks in the remaining three states. In order to eliminate the variations in the populations and numbers of banks which exist among the four states, all comparisons included in the article are based on the "average" bank in each state. In addition to comparisons of changes in key indicators of average banks in the study area, comparisons of changes in the key indicators of the average Oklahoma bank were made with those of the average "high performing" Oklahoma bank. These comparisons are discussed in the remainder of this article.

Comparative Bank Operations Ratio

The performance of the average bank operation in Oklahoma during 1988 showed several signs of improvement over its 1987 record while the performances of average banks in Arkansas, Louisiana and Texas generally showed less significant signs of improvement. Much of the somewhat better growth rate in Oklahoma is possibly due to its proportionately more severe losses between 1982 and 1987 than was the case in the other states studied which resulted in a lower base from which the Oklahoma growth rate was measured.

Some of the more significant signs of improvement were the growth in average owners' equity in Oklahoma banks which reached 8.3 percent of total liabilities which was the highest among the four states studied. Also, the investment in securities by the average Oklahoma bank rose to 33.5 percent of total assets which was also the highest among the banks in the four State area. While on the one hand, the increase in this performance indicator reflects a greater security and safety in a bank, it also suggests either that the loan market for the bank has become increasingly weaker or that bank management has less confidence in the loan applications it receives than it has had in past years. Regardless of the reasons however, the rise in security investment made by the Oklahoma bank between 1987 and 1988 was accompanied by a decrease in the proportion of funds loaned during 1988 to 47.0 percent of assets which was the lowest of the four states. In a like manner, the loan to deposit ratio of the Oklahoma bank declined from 54.3 percent in 1987 to 53.1 percent in 1988—also the lowest among the four state area.

Total deposits in average banks in both Oklahoma and Arkansas rose between 1987 and 1988 while those in Texas and Louisiana declined.

However, because of the rather significant increase in owners' equity in the average Oklahoma bank, the ratio of total deposits to total liabilities in this bank dropped from 90.5 percent in 1987 to 90.2 percent in 1988. The fact that owners' equity of the average bank in the remaining three states declined resulted in an increase in the ratio of total deposits to total liabilities in these states.

The net results of these changes in the condition of the average bank noted thus far is that the net income of the Oklahoma bank represented 0.4 percent of average assets in 1988 compared with 0.3 percent by the average Arkansas and 0.2 percent for the Louisiana bank and a loss of 0.6 percent by the Texas bank. Details of the data discussed above appear in Table 1.

Comparative Average Bank Performance Ratios

As was the case with the operations aspects of the average Oklahoma bank, its performance indicators tended to compare very favorably with those of the three comparable states. In 1988, the average Oklahoma bank experienced a net income return on equity of 0.2 percent. However, that of the average Texas bank was nearly 11 percent below owners' equity while that of Louisiana was a negative 7.3 percent and the Arkansas return was a negative 2.6 percent. Roughly, the same pattern was followed by the comparisons of net return on assets where the ratio for Oklahoma showed a return of 0.4 percent whereas the average Arkansas bank showed practically no return (i.e. less than .05 percent) and both Texas and Arkansas banks reflected negative returns.

The average Oklahoma bank also showed up well when comparing the average yield of total assets. In this case, the yield of total assets held by Oklahoma banks of 9.9 percent was second only to the 10.4 yield experienced by the average Arkansas bank and modestly better than the 9.8 and 9.7 percent experienced by average banks in Texas and Louisiana respectively. Insofar as ratio of equity to total assets is concerned, equity of average banks in both Oklahoma and Arkansas were 9.3 percent of total assets while equity levels in Texas and Louisiana banks were 8.2 percent and 8.5 percent respectively.

In other performance indicators, the

TABLE 1

Average Bank Operating Ratios
Arkansas, Louisiana, Oklahoma and Texas
1987 and 1988

	1987				1988			
	Arkansas	Louisiana	Oklahoma	Texas	Arkansas	Louisiana	Oklahoma	Texas
Banks per 100,000 Population	17.8	5.9	14.5	8.6	17.5	5.6	14.0	8.7
Number of Banks								
Number	426	264	477	1,672	423	247	456	1,458
Rank	3	4	2	1	3	4	2	1
Owners Equity Percent of Liabilities	8.7	7.7	8.1	7.3	8.2	7.3	8.3	8.9
Rank	1	3	2	4	3	4	2	1
Total Deposits								
Percent of Liabilities	88.2	90.2	90.5	90.7	89.0	90.6	90.2	91.2
Rank	4	3	2	1	4	2	3	1
Total Securities								
Percent of Assets	20.5	27.8	30.9	21.1	21.6	29.4	33.5	26.2
Rank	4	2	1	3	4	2	1	3
Net Loans								
Percent of Assets	50.7	51.1	48.5	50.7	54.1	49.5	47.0	47.6
Rank	3	1	4	2	1	2	4	3
Net Loans								
Percent of Deposits	66.5	61.3	54.3	68.1	65.3	62.5	53.1	60.6
Rank	2	3	4	1	1	2	4	3
Net Income								
Percent of Assets	-0.2	-0.6	-0.1	-0.5	0.3	0.2	0.4	-0.6
Rank	2	4	1	3	2	3	1	4
Net Interest Margin								
Percent of Assets	4.6	2.3	2.8	3.6	4.6	3.8	4.1	3.7
Rank	1	4	3	2	1	3	2	4

average Oklahoma bank fared less impressively than those discussed thus far as it registered a net equity loss during 1988 of 1.2 percent which was better only than the 3.9 percent equity loss which was sustained by the average bank operation in Louisiana. On the other hand, very little differences were noted in the areas of earning asset yield and net loan yields as in the former indicator, both Oklahoma and Texas banks registered yields of 10.1 percent while the average Arkansas bank registered the highest yield of 10.6 percent and the yield of the Louisiana bank was 10.2 percent. Net loan yields ranged from 11.4 percent (the average Texas bank) to 11.9 percent (the average Arkansas bank) with the yield of the average Oklahoma bank being 11.5 percent. The weakest areas of performance of the average Oklahoma bank were the rates of asset growth (2.5 percent versus 8.0 percent for Arkansas). The average Louisiana bank experienced an asset growth rate of 3.3 percent and a deposit growth rate of 4.4 percent, both of which were well above the rates experienced by the average bank doing business in Oklahoma. Details of these data appear in Table 2.

In summary, the average Oklahoma bank exhibited excellent strength, compared with the remaining three states, in owners' equity both as this indicator relates to liabilities and to assets. Moreover, its portfolio appears to be safer in that securities comprise a bigger share of its assets than do loans. Further, its net income to assets ratio is above those of average banks in the three remaining states and its net interest margin is second only to that experienced by the average bank in Arkansas.

Performancewise, the average Oklahoma bank sustained a larger rate of return on owners' equity and on assets than did the average bank on the three remaining states and also had a larger net profit margin. It performed reasonably well in terms of asset yield and the ratios of equity to assets but exhibited some weakness in earning asset and net loan yields and was well below the experiences of the average banks in the three remaining states insofar as asset and deposit growth rates were concerned. The lag in the rate of deposit growth for the average Oklahoma bank can be attributed in part to the relatively slow growth in personal income which has prevailed in the State during the past five years.

TABLE 2

Average Bank Performance Ratios
Arkansas, Louisiana, Oklahoma and Texas
1988

	Arkansas	Louisiana	Oklahoma	Texas
Percent Return[a] on Equity	-2.6	-7.3	0.2	-10.7
Rank	2	3	1	4
Net Profit Margin	0.02	-3.73	3.11	-6.04
Rank	2	3	1	4
Percent Return on Assets	0.0	-0.2	0.4	-0.6
Rank	2	3	1	4
Percent Asset Yield	10.4	9.7	9.9	9.8
Rank	1	4	2	3
Percent Equity to Assets	9.3	8.5	9.3	8.2
Rank	1	3	2	4
Percent Equity Formation Rate	33.2	-3.9	-1.2	4.3
Rank	1	4	3	2
Percent Earning Asset Yield	10.6	10.2	10.1	10.1
Rank	1	2	3	4
Percent Net Loan Yield	11.9	11.6	11.5	11.4
Rank	1	2	3	4
Percent Asset Growth	8.0	3.3	2.5	8.0
Rank	1	3	4	2
Percent Deposit Growth	8.8	4.4	2.9	9.5
Rank	2	3	4	1

[a]Net income return.

All Oklahoma Banks vs. High Performance Banks

For the purpose of this study, high performance banks are the upper 20 percent of the banks in Oklahoma based on return on equity. In 1988, there were 85 banks which fell in this category of which only 12 were located in one of the State's four Metropolitan Statistical Areas. This suggests that, for the most part, the high performing banks are located in smaller communities throughout the State and thus have lower owners' equity levels which allows for higher *rates* of increase to occur. However, despite the fact that the average high performing bank is generally smaller than the average of all banks, its performance ratios are impressive. For example, where the average Oklahoma bank experienced a return on equity in 1988 of 0.2 percent, the average high performing bank showed a near 21 percent return. In addition, the average Oklahoma bank

suffered a 1.2 percent decrease in equity formation whereas the average high performing bank increased equity by 13.4 percent. The average high performing bank also showed significantly greater growth rates in assets and deposits and, at the bottom line, had a net profit margin of 15.7 percent which was approximately five times the rate of the average Oklahoma bank. Other rate and ratio comparisons are shown in Table 3.

Neil J. Dikeman, Jr. is Director for the Center for Economic and Management Research.

TABLE 3

Average Bank Performance Ratios
All Oklahoma Banks versus High Performance Oklahoma Banks

Performance Ratio	All Oklahoma Banks	High Performance[a] Banks
Percent Return on Equity	0.2	20.8
Percent Return on Assets	0.4	1.8
Percent Asset Yield	9.9	10.9
Percent Equity to Assets	9.3	9.5
Percent Equity Formation Rate	-1.2	13.4
Percent Earning Asset Yield	10.1	10.4
Percent Net Loan Yield	11.5	12.1
Percent Asset Growth	2.5	6.8
Percent Deposit Growth	2.9	7.0
Net Profit Margin	3.1	15.7

[a]High Performance Banks are defined as the upper 20 percentile of banks based by returns of equity ratios.

The Sources of Employment Change in the Oklahoma Economy First through Third Quarters 1988

DAVID PENN

CHANGES IN EMPLOYMENT in the state's economy from one period to the next are caused by four types of business activity: expansions, contractions, the birth of new businesses, and the death or dormancy of existing businesses. Any employment change in the economy or in any particular industrial sector conceptually can be allocated among these four components.

Unfortunately, such an analysis of the sources of employment change is not possible using traditional published employment data. While a substantial amount of detail is available in published form by month and industrial sector, these data only indicate the net change in employment from period to period. For example, if private sector employment was 844,000 in the first quarter of 1988 and 875,000 in the third quarter, the net change is 31,000 jobs. But which of the above factors contributed to this net change in employment? Was the net employment gain due mainly to the creation of new businesses or did increased hiring by expanding businesses have a greater affect? How many firms cut back on employment and how many jobs were lost due to firms that went out of business?

In cooperation with the Oklahoma Department of Commerce and the Oklahoma Employment Security Commission, the Center for Economic and Management Research has determined the components of payroll employment change in the state's economy for the first three quarters of 1988. The calculations were made possible by access to detailed establishment-level employment data for nearly 70,000 individual private sector employers in the state. By matching employment records from quarter to quarter, each individual business establishment could be classified in terms of the source of the establishment's employment change. The business establishments analyzed in this study are those subject to pay unemployment insurance tax to the State of Oklahoma. These establishments include the vast majority of private sector employment in the state, since most businesses of any size are subject to pay unemployment insurance taxes. Although many proprietorships may not be subject to pay the tax, the total number of employees excluded in this case probably is small.

Change in Total Payroll Employment

As shown in the graph, expanding establishments generated a large number of new jobs in the Oklahoma economy between the 1st and 3rd quarters of 1988. Expanding establishments created nearly 80,000 jobs from the 1st to 2nd quarters, with an additional increase of 64,000 jobs from the 2nd to 3rd quarters.

These job increases dwarfed the gain in jobs caused by the creation or entry of new businesses in the state's economy. New firms contributed just 7,500 and 6,400 new jobs during the 2nd and 3rd quarters, respectively.

Similarly, the vast bulk of job losses were due to business contractions. Establishments that cut back on employment rolls reduced the number of jobs by 57,500 from the 1st to 2nd quarters and another 60,300 from the 2nd quarter to the 3rd. By contrast, firms that became dormant in the second and third quarters caused payroll employment to fall by only about 4,800 jobs in both the 2nd and 3rd quarters.

To summarize, from the 1st through the 3rd quarters of 1988, expanding businesses in the Oklahoma economy produced more than 144,500 jobs while contracting firms eliminated 118,000 jobs resulting in a net change of employment in continuing business establishments of 26,500. Likewise, jobs generated by new businesses less those lost to dormant businesses equalled 4,100 from the 1st through 3rd

quarters. The total net change in employment, then, equals 26,500 plus 4,100, or 30,600 jobs.

Employment Changes by Major Industrial Sector

As Table 1 shows, the industrial sectors with the largest number of job gains from expanding businesses also experienced the largest number of job losses due to business contractions. The services sectors, for example, gained 41,000 jobs from the 1st through 3rd quarters due to business expansions but lost 34,000 jobs due to contracting businesses.

Interestingly, the construction sector experienced the largest proportional job gains of any industry. Gains due to business expansions plus the entry of new firms produced 13,600 jobs from the 1st to 3rd quarters, equalling 45 percent of 1st quarter employment.

Change in Private Sector Employment by Source
Oklahoma 1st-3rd Quarters
1988

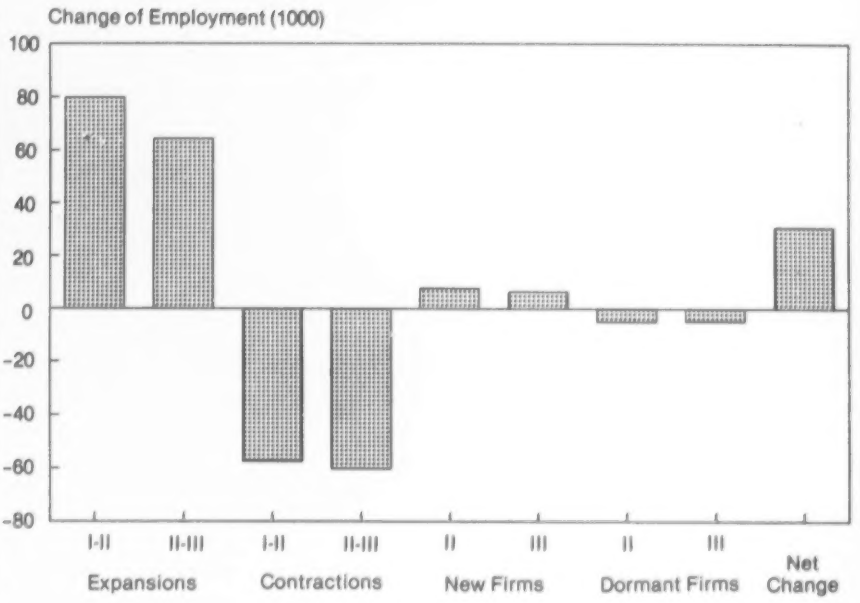


TABLE 1

Private Sector Employment Change in Oklahoma by Source and Industry Division First, Second, and Third Quarters 1988 (thousands)

Industry	First Quarter Employment	Source of Employment: Expanding Firms I-II	Expanding Firms II-III	Contracting Firms I-II	Contracting Firms II-III	New Firms II	New Firms III	Dormant Firms II	Dormant Firms III	Net Change I-III	Third Quarter Employment
Agriculture	7.95	1.49	0.70	-0.90	-0.76	0.09	0.08	-0.02	-0.04	0.63	8.57
Mining	45.66	3.29	2.63	-3.78	-4.03	0.21	0.13	-0.14	-0.16	-1.84	43.82
Oil and gas	43.24	3.05	2.47	-3.53	-3.72	0.20	0.13	-0.12	-0.16	-1.67	41.57
Construction	32.50	7.09	6.55	-4.26	-4.31	0.54	0.42	-0.35	-0.33	5.36	37.86
Manufacturing	159.34	12.52	8.73	-6.49	-8.57	0.68	0.36	-0.53	-0.39	6.31	165.65
Nondurable	53.56	3.09	2.58	-2.10	-2.62	0.27	0.07	-0.12	-0.09	1.09	54.65
Durable	105.78	9.44	6.15	-4.39	-5.95	0.40	0.28	-0.41	-0.30	5.22	111.00
TCPU[a]	59.95	3.49	2.78	-2.71	-2.33	0.58	0.26	-0.13	-0.47	1.48	61.43
Wholesale trade	59.30	5.55	4.29	-3.76	-4.18	0.59	0.42	-0.37	-0.18	2.37	61.66
Retail trade	208.19	19.29	17.10	-14.02	-15.62	2.13	1.82	-1.70	-1.69	7.31	215.50
FIRE[b]	58.71	3.97	3.72	-3.54	-4.07	0.55	0.80	-0.53	-0.44	0.46	59.17
Services	212.70	23.23	17.86	-18.06	-16.10	2.14	2.05	-1.11	-1.15	8.87	221.56
Business	35.69	5.78	5.89	-5.35	-3.31	0.43	0.22	-0.12	-0.23	3.31	39.01
Health	73.76	4.69	3.09	-4.21	-3.28	0.29	0.27	-0.18	-0.22	0.44	74.20
Unclassified	0.29	0.00	0.00	0.00	-0.27	0.00	0.00	-0.02	0.00	-0.29	0.00
TOTAL	844.59	79.92	64.36	-57.51	-60.26	7.52	6.35	-4.89	-4.84	30.84	875.23

Source: Center for Economic and Management Research.

[a]Transportation, Communications and Public Utilities.

[b]Finance, Insurance and Real Estate.

The largest employment changes occurred among general contractors engaged in the construction, remodeling, and repair of nonresidential buildings other than industrial buildings and warehouses (SIC 1542). This industry gained 2,018 jobs from the 1st to 3rd quarters due to business expansions but also lost 1,275 jobs due to business contractions. Job changes due to the birth of new business and dormancy of existing business nearly cancelled one another (Table 2).

Other construction industries with large proportional employment changes include Highway and Street Construction (SIC 1611), Electrical Work (SIC 1731), Plumbing, Heating, and Air Conditioning (SIC 1711), and Water, Sewer, Pipeline, and Communications (SIC 1623). The number of jobs added by these industries due to business expansions equalled at least one-third of 1st quarter employment. Jobs lost due to contracting businesses also were large when compared with employment in the 1st quarter.

Employment Changes by Area

Business expansions and contractions were the major contributors to employment changes for the metropolitan areas of the state (Table 3). In the Oklahoma City metropolitan area, business expansions increased employment by an amount equal to 16 percent of 1st quarter employment, while contracting businesses cut back by about 13 percent of 1st quarter employment. Employment gains caused by the birth of new firms equalled less than 2 percent of employment in the 1st quarter of 1988.

Conclusions

Sources of change of payroll employment from the 1st through 3rd quarters of 1988 were attributed mainly to the effects of business expansions and contractions. The birth of new business firms or the absence of existing firms in Oklahoma appeared to have little impact on employment change during the period.

It should be noted that these results appear to contrast markedly with data published by the U.S. Small Business Administration (SBA). Relying on data managed by Dun and Bradstreet, the SBA estimated that during the period 1980-1986, business births and deaths accounted for a majority of the net increase in jobs in Oklahoma and other states, not expansions and contractions. The difference between the SBA findings and those detailed in this study are probably due to the difference in the time periods anlayzed and also the types of data used. The SBA study covered a very volatile period for the Oklahoma economy during which a relatively large number of business births and deaths might reasonably be expected. By contrast, this study examines the first three quarters of 1988, a period characterized by a significant amount of steady economic recovery for the state's

TABLE 2

Sources of Employment Change in Selected Construction Industries First, Second, and Third Quarters 1988

SIC Code	First Quarter Employment	Source of Employment					Third Quarter Employment
		Expansions	Contractions	New Firms	Dormant Firms	Net Change	
1542	4,197	2,018	(1,275)	124	(132)	735	4,933
1611	2,293	1,420	(502)	22	(35)	905	3,198
1731	4,306	1,190	(867)	60	(61)	322	4,628
1711	4,198	980	(874)	135	(71)	170	4,367
1623	2,447	837	(781)	73	(23)	106	2,553
1629	1,609	811	(593)	56	(10)	266	1,875
1761	1,633	802	(331)	48	(59)	461	2,094

Source: Center for Economic and Management Research.

SIC Code: 1542 General Contractors — Nonres. Bldg, Ex. Industrial
1611 Highway and Street Construction
1731 Electrical Work
1711 Plumbing, Heating, and Air Conditioning
1623 Water, Sewer, Pipeline, and Communcations Construction
1629 Heavy Construction, Not Elsewhere Classified
1761 Roofing, Siding, and Sheet Metal Work

TABLE 3

Private Sector Employment Change in Oklahoma by Area of State First, Second, and Third Quarters 1988 (thousands)

Area	First Quarter Employment	Source of Employment: Expanding Firms I-II	Expanding Firms II-III	Contracting Firms I-II	Contracting Firms II-III	New Firms II	New Firms III	Dormant Firms II	Dormant Firms III	Net Change I-III	Third Quarter Employment
Oklahoma City MSA	297.26	27.13	22.34	-19.44	-19.35	2.52	2.55	-2.11	-1.69	11.94	309.21
Tulsa MSA	249.78	23.60	18.45	-16.51	-18.52	2.09	1.49	-1.38	-1.25	7.97	257.74
Comanche County	21.28	1.76	1.53	-1.48	-1.62	0.17	0.23	-0.16	-0.09	0.33	21.61
Garfield County	17.30	1.45	0.90	-1.15	-1.10	0.06	0.12	-0.04	-0.06	0.17	17.47
Muskogee County	16.73	3.18	1.29	-1.99	-1.64	0.15	0.15	-0.14	-0.07	0.93	17.66
Rest of State	242.25	22.81	19.85	-16.93	-18.03	2.53	1.80	-1.06	-1.68	9.29	251.54
TOTAL	844.59	79.92	64.36	-57.51	-60.26	7.52	6.35	-4.89	-4.84	30.64	875.23

economy. Also, the SBA study relied on Dun and Bradstreet data that are sometimes criticized for lack of reliability. The results of this study are qualitatively similar to the results of a similar study in Michigan which found that during the period 1982-1984, business expansions and contractions accounted for most of the net change in payroll employment in the state.[1]

While the preliminary results discussed here indicate that existing businesses play a very important role in explaining net employment changes, generalizations regarding the source of future job growth would be hazardous based on just three quarters of data. Analysis of several additional quarters of employment data will be required before policy conclusions can be made.

Note

[1]John Case, "The Disciples of David Birch," *INC.*, January 1989.

David Penn is Assistant Director for the Center for Economic and Management Research.

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Center for Economic and Management Research
University of Oklahoma
Norman, Oklahoma 73019-0450

CONGRESSIONAL INFO. SERVICE/SRI
ATTN: ROBERTA B. MASON
4520 EAST-WEST HIGHWAY
BETHESDA MD 20814

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